## ABSTRACT OF THE DISCLOSURE

There is disclosed a semiconductor wafer obtained, at least, by removing a mechanical damage layer by etching both surfaces of the wafer, flattening one of the surfaces by a surface-grinding means, polishing both of the surfaces, and then subjecting a front surface of the wafer to a finishing mirror-polishing when defining the surface subjected to surface-grinding as a back surface of the wafer, and a method for fabricating it. There can be provided a method for fabricating a semiconductor wafer wherein grinding striations which remain on a semiconductor wafer even when double side polishing and finishing mirrorpolishing are conducted after a conventional step of surface-grinding of the front surface or the both surfaces, are eliminated to improve quality of the front surface of the wafer, and the back surface having a quality suitable for the device process can be obtained, and a semiconductor wafer obtained thereby.